

STATE OF CONNECTICUT

DEPARTMENT OF ENVIRONMENTAL PROTECTION



March 11, 2002

The Honorable Donald E. Williams
The Honorable Jessie G. Stratton
Co-Chairpersons
Environment Committee
Room 3200
Legislative Office Building
Hartford, CT 06106

Re: *Annual Report Pursuant to Public Act No. 00-175*
An Act Concerning the Use of MTBE

Dear Co-Chairpersons Williams and Stratton:

I am writing to update you on the status of the Department of Environmental Protection's (the "Department's") efforts pursuant to Public Act No. 00-175, *An Act Concerning the Use Of MTBE*. According to this act, the Department is required to submit an annual report to the Environment Committee starting January 1, 2001 outlining the Department's progress on a plan to eliminate methyl tertiary butyl ether ("MTBE") as a gasoline additive. At this point, the Department's outlook for eliminating MTBE by the 2003 ban date appears improbable, if not impossible. Given Connecticut's relative size in the regional gasoline market and the fact that the governing forces behind MTBE are principally national and federal rather than state, we are caught in a dilemma that I will outline herewith.

MTBE is an oxygenate that is added to gasoline in order to provide air quality benefits to the state and region. However, MTBE's significance as a groundwater contaminant warrants its elimination. As you recall, Connecticut has enacted legislation to ban gasoline that contains MTBE effective in the year 2003. Agency staff has been evaluating our options to eliminate MTBE that does not have unacceptable collateral environmental or economic consequences.

The Federal Clean Air Act is one of the obstacles to the elimination of gasoline that contains MTBE because it requires oxygenated fuel in Connecticut and industry has chosen MTBE as the oxygenate of choice. Banning MTBE in the New England region would result in a de facto ethanol mandate since ethanol is the only other mass produced oxygenate which currently meets the Clean Air Act standards. From a water quality perspective, ethanol is clearly superior to MTBE but it is not readily available as a substitute due to high demand and short supply nationally and no regional infrastructure to produce it for local markets. In addition, conservative estimates suggest that even if ethanol were generally available or even if there were regional suppliers that could deliver ethanol as a "boutique" gasoline mix to Connecticut, its added cost would be in the range of 3 to 11 cents per gallon. There is simply no evidence that a "boutique" mix for Connecticut is economically viable under either scenario.

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Co-Chairpersons

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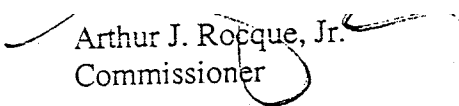
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Connecticut is simply too small and does not represent a large enough market to unilaterally call for a ban for MTBE. It also appears unlikely that we can rely on EPA to grant a waiver from the oxygen mandate as specified in the Clean Air Act although we are in the process of developing such a request. We have been studying California's experience on its unsuccessful waiver request to try to avoid some of the pitfalls into which they fell. Simultaneously, we have been working with other states in the region to better prepare the technical documentation we believe to be required to accompany a successful waiver request as well as working to consolidate our collective market position. We also have been working on a regional basis to encourage Congressional repeal of the oxygen mandate as specified in the Clean Air Act Amendments of 1990.

As you know from my prior report to the Environmental Committee, it is my position that we should adjust our legislative ban so that it does not have the effect of either outlawing gas in Connecticut or causing default on our federally mandated air quality programs. It is clear that a regional ban that was implemented simultaneously would be sufficient to change the outcome, more likely resulting in either EPA waivers, Congressional repeal of the federal standard or interest by investors in creating ethanol producing infrastructure. The Department is therefore recommending that the deadline for prohibiting MTBE be extended if none of the three prerequisites for success are achieved.

At the request of the New England environment commissioners, several organizations, such as the Northeast States for Coordinated Air Use Management (NESCAUM) and the New England Interstate Water Pollution Control Commission (NEIWPIC), have prepared reports that address key issues that impact Connecticut's plan to phase out MTBE. I have attached these for your information. Thank you.


Sincerely,


Arthur J. Rocque, Jr.
Commissioner

AJR:JF:emw

Annual Report Pursuant to Public Act No. 00-175
An Act Concerning the Use of MTBE

BACKGROUND

The federal reformulated gasoline (RFG) program was designed to reduce emissions from motor vehicles. To comply with the RFG program, gasoline must achieve a set of emission performance standards and meet a minimum oxygen content requirement. There are only two oxygenates, MTBE and ethanol, currently produced in quantities sufficient to meet the demand created by the RFG program. Refiners have opted to sell in the Northeast an RFG blend that contains MTBE.

Studies have shown that accidental gasoline spills have resulted in MTBE contamination of groundwater. As a result, Connecticut has adopted legislation to ban gasoline that contains MTBE effective in the year 2003. Therefore, under current federal law, eliminating MTBE represents a de facto mandate for ethanol to meet the state's requirement for RFG. However, there are environmental and economic concerns associated with using ethanol as a fuel additive in the Northeast. The challenge facing policy makers requires striking a balance between several complex factors. These factors include mitigating the environmental harm caused by MTBE contamination of the region's water resources without sacrificing the environmental and public health benefits provided by RFG and without undermining a reliable supply of gasoline that is not cost prohibitive. The current federal oxygenate standard leaves states in an untenable position of an ethanol mandate that can result in environmental backsliding from an air quality perspective, or significant price increases in the cost of gasoline, or both.

NEW ENGLAND GOVERNOR'S CONFERENCE

On August 7, 2001 the New England Governor's Conference (NEGC), chaired by Governor Rowland, endorsed a report prepared by the Northeast States for Coordinated Air Use Management (NESCAUM) and the New England Interstate Water Pollution Control Commission (NEIWPCC) that provides a detailed analysis of the issues surrounding MTBE and ethanol in gasoline. The 3-volume report, entitled *Health, Environmental and Economic Impacts of Adding Ethanol to Gasoline in the Northeast States*, was released in July of 2001 and is attached for your reference. The NEGC adopted a resolution endorsing the findings of the NESCAUM/NEIWPCC report that includes, among other things, a recommendation to coordinate a regional phase down of MTBE. As noted in the executive summary of the report, the use of RFG in the Northeast has provided substantial reductions in smog forming emissions and has drastically reduced emissions of benzene and other known carcinogens found in vehicle exhaust. However, substantial evidence indicates that the unique chemical and physical properties of MTBE pose an unacceptable risk to the region's potable water supply.

COST IMPLICATION OF ELIMINATING MTBE

Eliminating MTBE from gasoline, while continuing to meet the existing RFG oxygenate mandate, will result in the introduction of hundreds of millions of gallons of ethanol into the region's gasoline pool by 2003. This will have significant economic impacts by potentially increasing the cost of gasoline in Connecticut conservatively estimated at 3 to 11 cents per gallon. However, the ban date of October 1, 2003 puts Connecticut on a more accelerated phase out schedule of MTBE than other states regionally or nationally and this may result in cost increases greater than 3 to 11 cents per gallon particularly since the availability of ethanol has also been questioned. The increase in cost is the result of several key factors:

Fuel Reformulation Costs – Formulation changes associated with eliminating MTBE are likely to increase the cost of gasoline production due to the need for process changes and equipment modifications as well as the inclusion of replacement blend components that are more expensive than MTBE. Critical factors in the cost effectiveness equation are the timeframe for phase in, the relative supply and demand for fuel constituents, and the longer term prospects for developing ethanol production capacity in New England.

Infrastructure Costs – Due to ethanol's unique properties, notably its affinity for water, a new infrastructure to transport millions of gallons of ethanol from the mid-west and internationally will need to be developed. The existing distribution systems have water infiltration problems that cause ethanol to separate out of gasoline. Ethanol will require different handling and transport methods than have been used for MTBE. California has estimated that it will cost approximately \$60 million and will take up to 24 months to modify storage tanks and unloading facilities and to install of blending equipment at distribution terminals. The NESCAUM/NEIWPCC study estimates that the cost for the Northeast would be roughly \$48 million.

Economic Costs – Projections show that in 2003 approximately 1.5 billion gallons of gasoline will be sold in Connecticut. A one-cent per gallon increase translates to about \$15 million dollars of outflow from the state. Since most RFG is produced outside the region, increased gasoline prices represents a substantial outflow of economic resources from the regional economy. The NESCAUM/NEIWPCC study cites a 1999 U.S. Department of Energy report estimating that the average cost of RFG produced at east coast refineries would increase by 3.9 cents per gallon if all MTBE were replaced by 2004 under a nationwide ban on ethers. Connecticut is the only state in New England that has banned MTBE by 2003; this makes projecting potential increases in gasoline prices difficult. While difficult to predict with accuracy, unilateral action by Connecticut will result in per gallon increases in the cost of gasoline beyond those predicted for national or regional actions. The NECAUM/ NEIWPCC study clearly shows that a longer lead-time that enables a coordinated regional phase-out of MTBE would translate into cost savings on projected increases in gasoline prices.

CONNECTICUT LEGISLATIVE ACTION ON MTBE

Currently, Section 22a-450 requires the Department to develop and implement a plan for the phase-out of the use of MTBE as a gasoline additive in a manner that will eliminate MTBE on and after by October 1, 2003. As a result of the NEGC resolution for a regional phase-out of MTBE and the concerns regarding the environmental and economic impact associated with the use of ethanol as a gasoline additive, the Department initially recommended amending Section 22a-450 to delay the elimination of MTBE until December 31, 2005. However, with the recent difficulties encountered by California in attempting to receive an oxygenate waiver from EPA, it may be necessary to further delay the date to ban MTBE.

CONGRESSIONAL ACTION ON MTBE

Senator Thomas Daschle is sponsoring Senate Bill 1766 that would require motor vehicle fuels nationally to contain a renewable fuel standard. Renewable fuel is defined to be produced from biomass or is natural gas produced from a biogas source and is used to replace or reduce the quantity of fossil fuel present in fuel mixtures used to operate a motor vehicle. The amount of renewable fuel will be phased-in starting in the year 2004 at 2.3 billion gallons to the year 2012 at 5.0 billion gallons. Ethanol would qualify as a renewable fuel. Currently, approximately 1.5 billion gallons of ethanol is sold nationwide per year. The Northeast is concerned about the quantities of renewable fuels being proposed and will be coordinating with other states with similar concerns, such as California, to inform the Senate that the large quantities of renewable fuels proposed would adversely impact the environment and economy of many areas of the nation. Senate Bill 1766 was introduced in the Senate in December 2001 and will be taken up for debate when the Senate returns to session.

STATUS OF WAIVER REQUEST

Under Section 211(k) of the Clean Air Act states may receive a waiver from the oxygenate requirement of the reformulated gasoline (RFG) program. This is not to be confused with a waiver from the use of MTBE. In 1999, the State of California submitted a request to EPA to waive the federal oxygen content requirement for RFG. In June 2001, EPA announced that they would not approve California's waiver request citing "there is no clear evidence that a waiver will help California to reduce harmful levels of air pollution." In August 2001, Governor Davis of California filed a lawsuit against EPA over the decision to reject California's waiver request. A hearing regarding the lawsuit is pending.

How the courts handle California's lawsuit will largely determine the prospects for Connecticut, and other states, to obtain a waiver. The Department has been working with NESCAUM on developing a regional waiver request to EPA on behalf of the Northeast states subject to federal reformulated gasoline regulations. While the Department intends to seek a waiver as part of a regional strategy given California's experience it is extremely unlikely Connecticut would prevail. Moreover, a waiver request will not serve as a timely solution for Connecticut given an effective MTBE ban date of 2003. In addition, it is estimated that preparation of a complete waiver request will cost approximately \$1,000,000 based on estimates provided to us by the State of California.

This would include staff time from the Department, the Attorney General's Office and an estimate of \$700,000 in contractor cost to conduct refinery modeling. The Department will continue to monitor California's lawsuit against EPA.

MTBE OUTREACH EFFORTS

A public outreach workgroup was formed in July 2000 to develop an effective education campaign on proper handling and use of gasoline with MTBE. The goal of the outreach workgroup was to develop a plan to educate all users of gasoline, including homeowners, marine trades and businesses on how to reduce MTBE from entering the environment through improper gas handling.

Working with NESCAUM, the workgroup agreed to design a sticker (approximately 4-½ inch by 8-inch) for display at commercial gasoline stations on gasoline pumps as Phase 1 of the educational campaign. The 2-color stickers will list tips on the safe handling of gasoline. The plan was to distribute over 7,000 stickers statewide along with a letter signed by the Commissioner of Environmental Protection.

The Connecticut Petroleum Council is organizing the industry's effort to secure bids for the cost of printing. The approximate cost for printing 10,000 stickers is \$3,500. Other trade groups will participate in distribution of stickers to Connecticut gasoline stations.

Phase 2 of the educational campaign may include a press event at the State Capitol to coincide with Ozone Awareness Week as well as other media events to encourage awareness of the education campaign and proper handling of gasoline.